



Translation

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 283PCT	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/JP2003/009522	International filing date (day/month/year) 28 July 2003 (28.07.2003)	Priority date (day/month/year) 26 July 2002 (26.07.2002)
International Patent Classification (IPC) or national classification and IPC H01G 9/038, 9/035		
Applicant SANYO CHEMICAL INDUSTRIES, LTD.		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>	
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>	

Date of submission of the demand 15 January 2004 (15.01.2004)	Date of completion of this report 28 July 2004 (28.07.2004)
Name and mailing address of the IPEA/JP	Authorized officer
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# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/009522

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:

- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☒ The international application as originally filed/furnished

☐ the description:

pages \_\_\_\_\_, as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ the claims:

pages \_\_\_\_\_, as originally filed/furnished

pages\* \_\_\_\_\_, as amended (together with any statement) under Article 19

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ the drawings:

pages \_\_\_\_\_, as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

**1. Statement**

Novelty (N)	Claims	1-8	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-8	NO
Industrial applicability (IA)	Claims	1-8	YES
	Claims		NO

**2. Citations and explanations (Rule 70.7)**

Document 1: JP, 2000-281657, A (SANYO CHEMICAL INDUSTRIES, LTD.), 10 October 2000

Document 2: JP, 2000-232037, A (SANYO CHEMICAL INDUSTRIES, LTD.), 22 August 2000

Document 3: JP, 2000-311839, A (MITSUBISHI CHEMICAL CORPORATION), 07 November 2000

Document 4: WO, 95-15572, A1 (SANYO CHEMICAL INDUSTRIES, LTD.), 08 June 1995 & EP, 684620, A1

**Claims 1-8**

Document 1 cited in the ISR (see, in particular, the claims; Par. Nos. [0035]-[0041], [0045]) describes using 1-ethyl-3-methylimidazolium tetrafluoroborate produced while removing secondarily produced carbon dioxide gas to outside the system as an electrolyte for an electrical double-layer capacitor, and describes using carbonates, etc. as a solvent for the electrolyte, and says there are few impurities included in this electrolyte.

Therefore the cycloamidinium salt derivative (produced by reacting a cycloamidinium salt and carbon dioxide gas) defined by formula (2) in claim 1 can be understood as something no greater than the specified value. Therefore claims 1-8 do not involve an inventive step.

Document 2 cited in the ISR (see, in particular, the claims; Par. Nos. [0012]-[0017]), document 3 cited in the ISR (see, in particular, the claims; Par. No. [0017]), and document 4 cited in the ISR (see, in particular, the claims) describe using a salt consisting of 1,3-dimethylimidazolium or 1-ethyl-3-methylimidazolium and an organic acid as the solute for an electrolyte for an electrochemical capacitor.

In addition, document 3 cited in the ISR pertains to an electrolyte used in an electrochemical capacitor and specifies the impurities and says the content of those impurities is no greater than a specified value in order to satisfy the desired characteristics. Therefore constituting the invention of claims 1-8 based on documents 1-4 cited in the ISR could easily be conceived by a person skilled in the art.

Therefore the subject matter of claims 1-8 does not involve an inventive step.